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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/666,928	09/21/2000	Jay Kin Keung	10188	6748

7590 01/30/2002  
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EXAMINER	
VO, HAI	
ART UNIT	PAPER NUMBER
1771	3

DATE MAILED: 01/30/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/666,928

Applicant(s)

KEUNG ET AL.

Examiner

Hai Vo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 September 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) 9 and 10 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

***Election/Restrictions***

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-8, drawn to a heat-sealable multilayer white opaque film, classified in class 428, subclass 317.9.
- II. Claims 9 and 10, drawn to a process of packaging a frozen novelty, classified in class 426, subclass 392.

2. The inventions are distinct, each from the other because of the following reasons:

Inventions I and II are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case, the product as claimed can be used in a materially different process of using that product such as one wherein the potato chip is a packaging product instead of ice cream bar.

3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

4. During a telephone conversation with Ricky James on 01/14/02 a provisional election was made with traverse to prosecute the invention of Group I, claims 1-8.

Affirmation of this election must be made by applicant in replying to this Office

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action. Claims 9 and 10 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Schuhmann et al (US 5,326,625). Schuhmann or Keller discloses a sealable opaque multilayer polypropylene film having five layer construction that is satisfied the requirements of the claims (abstract). Schuhmann discloses TiO<sub>2</sub>, white pigment, being included in the intermediate layer as additive (column 6, lines 34 and 35). Schulmann further teaches the top layer having SiO<sub>2</sub> as an antiblocking agent and polydimethylsiloxane as a lubricant (column 9, lines 24-26). Schuhmann anticipated the claimed subject matter.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schuhmann et al (US 5,326,625) in view of Keller et al (US 5,691,043). Schuhmann

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discloses the top skin layer comprising polypropylene and SiO<sub>2</sub> (column 7, line 54 and column 9, line 25), the bottom skin layer comprising a terpolymer of ethylene-propylene-butylene (column 7, lines 49-50) and SiO<sub>2</sub> (column 9, line 25).

Schuhmann is silent as to polybutylene terephthalate (PBT) of the core layer and silicone oil and crosslinked silicone of the bottom top layer. Keller teaches the core layer comprising PBT as the cavitating agent (column 7, lines 15-17). It would have been obvious to one having ordinary skill in the art at the time the invention was made to have incorporated PBT into the core layer motivated by the desire to form microvoids resulting in a white opaque film. Keller discloses a skin layer comprising silicone oil and crosslinked silicone (column 8, lines 40-64). It would have been obvious to one having ordinary skill in the art at the time the invention was made to have incorporated the crosslinked silicone and silicone oil into the bottom top layer motivated by the desire to reduce the coefficient of friction properties of the film.

With regard to claim 3, Schuhmann discloses the top skin layer comprising 0.1 to 0.5% SiO<sub>2</sub> and CaCO<sub>3</sub> (column 10, lines 33-37), the intermediate layer comprising 3% TiO<sub>2</sub> (example 3).

9. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schuhmann et al (US 5,326,625) in view of Keller et al (US 5,691,043) as applied to claim 1, further in view of Falla et al (US 5,674,944). The combination of Schuhmann and Keller teach every element in the claims except a phosphite and fluoropolymer as the additives in the core layer. Falla supplies the missing features. Falla discloses the additives including phosphite antioxidant, and fluoropolymer as a processing aid

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(column 6, lines 28 and 34). It would have been obvious to one having ordinary skill in the art at the time the invention was made to have incorporated phosphite and fluoropolymer into the core layer motivated by the desire to obtain an ease of handling and stabilize the product processing.

10. Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schuhmann et al (US 5,326,625) in view of Keller et al (US 5,691,043) and Falla et al (US 5,674,944) as applied to claim 6, and further in view of Crighton et al (US 6,235,143). The combination of Schuhmann, Keller and Falla teaches every element of the claims except the methyl acrylate antiblock agent, concentrations of methyl acrylate, phosphite and fluoropolymer. Crighton discloses a heat sealed polymeric film comprising a polymethacrylate antiblock agent in the skin layer of the film (column 2, lines 32-34). It would have been obvious to one having ordinary skill in the art at the time the invention was made to have incorporated a polymethacrylate antiblock agent into the top skin layer motivated by the desire to obtain a film having good sealing with high slip on the heat seal jaws.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have altered the amount of the additive of the film since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233. It would have been obvious to the skilled artisan to have optimized the amount of the additive, motivated by the desire to obtain a multilayer

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film that is distinguished by a high whiteness, an outstanding opacity, good gloss and excellent sealing properties.

With regard to claim 8, Schuhmann discloses the film thickness of 40 microns and thickness of individual layer is as follows:

Core: 35.6 microns

Intermediate: 3.5 microns

Top skin layer: 0.2 micron

Bottom skin layer: 0.7 micron

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have altered the thickness range of individual layer of the film since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233. It would have been obvious to the skilled artisan to have optimized thickness range of individual layer of the film, motivated by the desire to obtain a multilayer film that is distinguished by a high whiteness, an outstanding opacity, good gloss and excellent sealing properties.

11. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schuhmann et al (US 5,326,625) in view of Keller et al (US 5,691,043) as applied to claims 3 above, and further in view of Falla et al (US 5,674,944) and Crighton et al (US 6,235,143). The combination of Schuhmann, Keller and Falla teaches every element of the claims except coated silica, the methyl acrylate antiblock agent of the top skin layer and the phosphite and fluoropolymer as additives of the core layer,

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and concentrations of these additives. There is nothing on the record that convinces the examiner that the coated silica is significant or better than uncoated silica as an antiblock agent. It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate coated silica into the top skin layer since the examiner takes official Notice of the equivalence of coated and uncoated silica for their use in the antiblocking agent art and the selection of any of these known equivalents would be within the level of ordinary skill in the art.

Falla discloses the additives including phosphite antioxidant, and fluoropolymer as a processing aid (column 6, lines 28 and 34). Crighton discloses a heat sealed polymeric film comprising a polymethacrylate antiblock agent in the skin layer of the film (column 2, lines 32-34). See obviousness rational of concentration range and thickness range in the paragraph above.

### ***Conclusion***

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai Vo whose telephone number is (703) 605-4426. The examiner can normally be reached on Monday to Friday, 8:30 to 5:00 (EAST). If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Blaine Copenheaver can be reached on (703) 308-1261. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.



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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

HV  
January 22, 2002

  
BLAINE COPENHEAVER  
SUPERVISORY PATENT EXAMINER  
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